



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/620,860   | 07/15/2003  | Antonio S. Cruz-Urbe | 200309104-1         | 9136             |
| 22879  | 7590        | 07/08/2005           | EXAMINER            |                  |
| HEWLETT PACKARD COMPANY<br>P O BOX 272400, 3404 E. HARMONY ROAD<br>INTELLECTUAL PROPERTY ADMINISTRATION<br>FORT COLLINS, CO 80527-2400 |             |                      | TENTONI, LEO B      |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1732                |                  |

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/620,860

Applicant(s)

CRUZ-URIBE ET AL.

Examiner

Leo B. Tentoni

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 43-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07152003:01282005</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1732

#### **DETAILED ACTION**

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1732, Examiner Leo Tentoni.

#### ***Election/Restrictions***

2. Applicant's election of Group I, claims 1-42 in the reply filed on 15 June 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

3. Claims 43-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 15 June 2005.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1732

5. Claims 1-26, 37 and 39-42 are rejected under 35

U.S.C. 102(b) as being anticipated by Kieronski (U.S. Patent 6,364,986 B1).

Kieronski (see the entire document, in particular, col. 2, line 1 to col. 4, line 63) teaches a process of making a three-dimensional object by solid freeform fabrication wherein the boundary structure is formed by stereolithography (which is deemed to meet the recitation of "selectively depositing").

6. Claims 1-26 and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Greul et al (DE 19537264 A1).

Greul et al (see the entire document, in particular, Figures 1 and 2) teach a process of making a three-dimensional object by solid freeform fabrication wherein the boundary structure is formed by selective deposition modeling.

7. Claims 1-26 and 39-42 are rejected under 35 U.S.C. 102(a) as being anticipated by Knoppers et al (WO 03/027960 A2).

Knoppers et al (see the entire document, in particular, page 2, line 19 to page 9, line 29) teach a process of making a three-dimensional object by solid freeform fabrication wherein the boundary structure is formed by selective deposition modeling.

Art Unit: 1732

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieronski (U.S. Patent 6,364,986 B1).

Kieronski (see the entire document, in particular, col. 2, line 1 to col. 4, line 63) teaches a process of making a three-

Art Unit: 1732

dimensional object by solid freeform fabrication, except that Kieronski do not explicitly teach selective deposition modeling, which would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Kieronski principally because selective deposition modeling and stereolithography are two of the common methods used in solid freeform fabrication.

11. Claims 27-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Greul et al (DE 19537264 A1) or Knoppers et al (WO 03/027960 A2).

Greul et al (see the entire document, in particular, Figures 1 and 2) and Knoppers et al (see the entire document, in particular, page 2, line 19 to page 9, line 29) teach a process of making a three-dimensional object by solid freeform fabrication as claimed, except for the aspects of a plurality of perimeter (or boundary) structures and porous products, which would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of either Greul et al or Knoppers et al principally in order to produce a desired final object.

### **Conclusion**

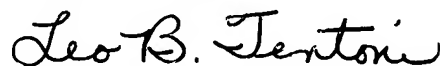
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B.

Art Unit: 1732

Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leo B. Tentoni  
Primary Examiner  
Art Unit 1732

lbt